LIGHTING LEAF

RF + WI-FI LED CONTROLLER

RF-WIFI-CNTRL-5CH-4A • All-in-1 DC digital controller • RF + Wi-Fi + Bluetooth

OVERVIEW

One controller for every tape. Control it any way you like.

An all-DC microcontroller system that delivers precise digital dimming, smooth color tuning and intelligent lighting effects. It runs single color, tunable white and full color tape from one part number, with wall remotes, the Lighting Leaf app, voice and Control4 working side by side.

- ✓ **Stock one controller:** one SKU covers DIM, CCT, RGBW and RGB+CCT jobs.
- ✓ **Install faster:** push-to-pair remotes, no programming, no hub.
- ✓ **Sell the upgrade:** start with a wall remote, add the app, voice or Control4 later on the same hardware.
- ✓ **Hide it anywhere:** slim, low-voltage Class 2 install near the tape.



Controller
RF-WIFI-CNTRL-5CH-4A



Matching RF wall remote
magnetic, removable

FEATURES AND BENEFITS

3 built-in wireless paths
Sub-1 GHz RF for remotes, Bluetooth for setup, Wi-Fi for app and cloud.

Every LED type
Single color, CCT, RGB, RGBW and RGB+CCT. Pick the mode with a DIP switch.

Push-to-pair
Tap Prog, press a remote button. Paired. Up to 8 remotes.

No hub required
The controller is the hub. Fewer parts to buy, mount and power.

App, voice and Control4
Lighting Leaf app, Alexa and Google, plus a free two-way Control4 driver.

Multi-zone sync
Master/slave sync keeps color effects in step across controllers.

OTA firmware updates
Updates arrive over Wi-Fi, so installed systems stay current.

Slim, low-voltage
145 × 46.5 × 16 mm. Screw terminals. Settings kept in memory.

HOW IT WORKS

Power > Controller > LED tape. Control devices talk to the controller in any combination.



Power supply
PS-24V200WND • 24V DC



Controller
RF-WIFI-CNTRL-5CH-4A



24V LED tape
Any Lighting Leaf series



RF wall remote
Long-range Sub-1 GHz



Lighting Leaf app
Bluetooth + Wi-Fi



Voice
Alexa and Google



Control4
Free two-way driver

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RF-WIFI-CNTRL-5CH-4A • Specifications, functions and wiring

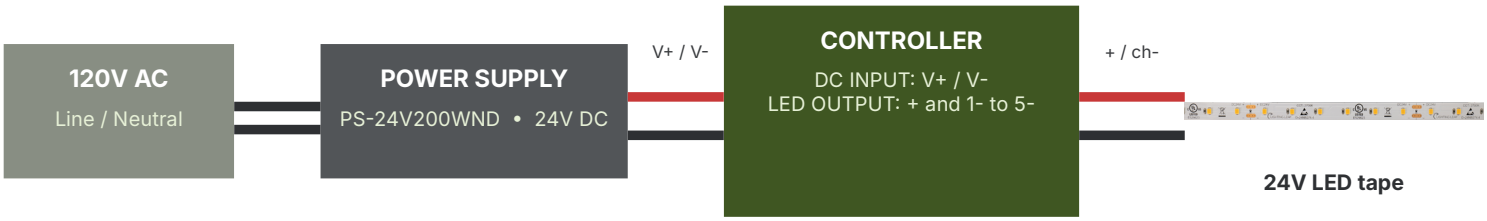
SPECIFICATIONS

Model	RF-WIFI-CNTRL-5CH-4A
Input	12-24V DC constant voltage
Max input current	20 A
Outputs	5 channels, common anode (+)
Output current	4 A per channel
Output power	48 W (12V) / 96 W (24V) per channel
Color modes	DIM, CCT, RGBW, RGB+CCT (DIP switch)
Wireless	Sub-1 GHz RF, 2.4 GHz Wi-Fi, Bluetooth LE
Remotes	Up to 8 Lighting Leaf RF remotes
Sync	Master/slave, up to 30 m (98 ft)
Terminals	Screw, 0.5-1.5 mm² (20-16 AWG)
Size	145 × 46.5 × 16 mm
Ambient	-20 to +50 °C; tc 75 °C max
Rating	IP20, indoor dry locations
Integration	Control4 OS 3.3.3+, Alexa, Google

FUNCTIONS

- ✓ **On / off and dimming**. 0-100% smooth DC dimming.
- ✓ **Tunable white**. Warm to cool color temperature.
- ✓ **Full color**. Color wheel, RGB and white channels.
- ✓ **Scenes**. 32 built-in scenes, plus your own.
- ✓ **Rhythm modes**. Up to 8, set on a schedule in the app.
- ✓ **Remote and app together**. Use both; the app shows the current state.
- ✓ **One remote, many zones**. Pair a remote to several controllers set to the same mode.
- ✓ **Sync effects**. Master/slave jumper keeps color effects in step.
- ✓ **Memory**. Settings are kept through power loss.
- ✓ **Reset**. Power cycle 5 times to clear all settings.

SIMPLE WIRING



Wire with power off. Strip 6-7 mm. Set the DIP switch for the tape type before power-up (factory default is RGB+CCT). Up to 4 A per channel, about 64 ft of IC-24NB301.5 per output; split longer single color runs across channels 1- to 4-.

OUTPUT MAP BY MODE

Terminal	DIM	CCT	RGBW	RGB+CCT
+	+	+	+	+
1-	1-	WW-	R-	R-
2-	2-	CW-	G-	G-
3-	3-	WW-	B-	B-
4-	4-	CW-	W-	CW-
5	NC	NC	NC	WW-

DIM: single color and IC tape • CCT: tunable white and Radiance CCT • RGBW: RGB, RGBW and Radiance RGB • RGB+CCT: RGB+CCT tape. NC = no connection.

MATCHING PARTS

Part number	Use
PS-24V200WND	24V DC 200 W power supply (non-dimming)
RF-WSR-SCDIM-BTR-WH	Wall remote, single color
RF-WSR-CCT-BTR-WH	Wall remote, CCT tunable white
RF-WSR-RGB+W-BTR-WH	Wall remote, RGB and RGBW
RF-DWS-RGB+W-BTR-WH	Dual wall switch, RGB and RGBW
RF-DWS-RGB+CCT-BTR-WH	Dual wall switch, RGB+CCT
Control4 driver	Free on request: sales@lightingleaf.com

FOR PROFESSIONAL INSTALLERS AND AUTHORIZED DEALERS

Sold only through authorized Lighting Leaf partners. Not for DIY installation. Quick start guides, datasheets and the Control4 driver: lightingleaf.com/resources • sales@lightingleaf.com

Alexa, Google and Control4 are trademarks of their owners. App setup needs a 2.4 GHz Wi-Fi network. Specifications subject to change.

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